

AN ACCOUNT
OF THE
REMOVAL OF A TUMOUR
SITUATED ON THE CHEEK.

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IT is presumed the following case, together with the annexed observations, which excited a difference of opinion amongst the surgeons consulted regarding the propriety and safety of the operation, will be thought worthy of publication, in as far as it may, at least, lead to a more correct mode of discriminating between the practicability and impracticability of excision with safety, in those more complicated morbid tumours situate in the region of the face or neck.

It is now about eighteen months since I was first consulted by Mrs. Taylor of Chorley, ten miles from hence, and in her forty-fourth year of

age, respecting a tumour on her cheek, which she informed me made its appearance nine years ago, after accidentally biting the mucous membrane of the mouth, which incident produced a small painful swelling on the part; the surgeon then employed made an incision into it, and much bleeding followed; the wound, however, soon healed, and the tumour progressively increased in size, and distended the muscles of the cheek outwardly. A perpetual blistering plaster was then applied on the part, and kept open for two weeks, but without producing any evident reduction in the bulk, or change of structure in the tumour, from which time it continued gradually spreading over the cheek, assuming a more formidable and disgusting appearance, till the time of the operation.

She also stated to me, that during its progressive state, she had consulted some of the most eminent practitioners in the neighbouring towns on the propriety of its removal. The unanimous result of their opinions was, that no operation could be effected with safety.

The tumour, at this time, extended anteriorly from the inferior edge of the right orbit, down the cheek, hung pendulous over the contour of the lower jaw, and laterally, from the angle of the mouth to near the tragus of the ear, and was remarkably prominent exteriorly.

At one period of its growth it pressed so much inwards on the gums, that mastication was accomplished with difficulty, insomuch, that she submitted to have all the molar teeth extracted from each jaw by the attending surgeon.

On passing the finger of one hand into the mouth, and applying those of the other externally over the surface of the tumour, the intervening morbid substance appeared slightly moveable, though tense, and rather elastic to the feel; its basis posteriorly adhered to the mucous membrane of the mouth, and it was very painful on pressure.

The integuments of the cheek were very thin and presented a pale glossy aspect, and the main surface of the tumour was covered with a network of varicose veins. The neighbouring glands did not appear to have sympathized with the disease.

The facial artery was perceived to beat actively on that part where it passes over the lower jaw.

From the situation and size of the tumour, and the date of its commencement, it was to be suspected that it had become attached and entailed with important contiguous structures, such as the

parotid gland and duct, the diversified ramifications of the nerves, arteries, and veins of the neck and cheek. These exposed parts, together with the thinness of the integuments, and apparent difficulty of dissecting the morbid substance from the lining of the mouth, without penetrating the partition, were considerations, when coupled with the fear of hæmorrhage, and a reproduction of the disease, that no doubt influenced the surgeons previously consulted on the case, to abandon any hope of a favourable issue by excision.

Under these impressions, I was led to try the external use of iodine, from which I have frequently witnessed very beneficial effects, particularly in dispersing tumours seated about the neck, but this, like every other means used, eventually failed, and no hope remained except that of removal with the scalpel. The woman evinced a great desire that I would without further delay undertake the operation ; and her general health appearing favourable, I consented to her entreaties, and she came to reside near Blackburn, that I might attend her more conveniently.

The 12th day of March last being fixed upon for the operation, I had her seated on a chair, with her head reclining on the breast of an assistant, and favourably placed to the light, and in the presence of Messrs. Dugdale, Barlow, Pickop,

Cocker, surgeons, and several other attendants, I commenced the operation at the upper part of the tumour, a little below the orbit, by making two incisions, extending downwards to near the basis of the lower jaw, meeting superiorly and inferiorly, and including in the ellipsis the most prominent part of the tumour. On attempting to dissect out the diseased mass from the adhering integuments, a profuse hæmorrhage followed each cut of the scalpel, and a sudden and death-like syncope seized the patient, which continued for the space of several minutes, accompanied with a feeble tremulous pulse, cold sweats, ghastly countenance, and suspended respiration. The knife was now laid aside, and the elliptical portion of the tumour instantly and firmly grasped between the ends of the fingers, by which manœuvre the bleeding was repressed, and the woman gradually revived, on repeatedly dashing cold water on the face; though much both venous and arterial blood was unavoidably lost during this stage of the operation *.

* To have attempted to tie these enlarged blood-vessels singly at this perilous period, and whilst the woman remained in a state of apparent exhaustion, would have been an hazardous adventure, and occupied so much time, that in all probability she would have expired, either from excessive hæmorrhage, or the gravitation or absorption of air into the divided evacuated veins in a way similar to that of the lady whose case forms a sequel hereto.

The dissection was then resumed by separating the skin and cellular tissue from the tumour, and to avoid making an opening through the membranous septa of the mouth, the cutting-edge of the knife was directed towards the diseased substance, and its whole circumference detached from its extensive adhesions, by drawing it forwards with the fingers of the left hand, whilst the scalpel was employed by the other in completely removing the tumour from its basis. After which the state of the mouth was examined, by passing thereinto the finger of one hand, and another of the other into the wound, where the parting membrane was found scarcely to exceed one line in thickness, from the edge of the masseter muscle to near the angle of the mouth; and though the parotid duct was fully exposed in the operation, it escaped being wounded with the knife, or its functions in any respect obstructed.

After securing several arteries with ligatures, which bled freely, the integuments were brought into apposition and retained by a few sutures, leaving a small opening at the bottom for an outlet to any accumulation of fluid which might collect during the healing of the wound; some shreds of adhesive plaster were then placed between each suture, and a pledget of lint spread with cerate applied thereon, over which a suitable bandage was several times turned to secure the whole. The

woman was then conveyed to bed, and expressed her gratitude to those around her for their assistance on the occasion.

In a short time after the operation, and when the re-action of the system was restored, a slight hæmorrhage occurred*, to repress which it became necessary to remove the dressings and cut out two of the sutures before the bleeding vessels could be secured; this being effected, the wound was again closed and dressed as before.

She now complained of excruciating pain of the cheek, probably from some nerves having been unavoidably included in the ligatures, to allay which, thirty drops of *liq. opii sedat.* were given in a little water, and in a short time she became easier and passed a tolerable night, though with little sleep. The wound was first dressed on the third day subsequent to the operation; the integuments were found chiefly united by the adhesive process, and healed rapidly without interruption, leaving only a very trifling disfiguration of the cheek, with a mere cicatrix on the site which the tumour had occupied.

Fortunately no contortions or paralysis super-

* In all probability this occurrence arose either from the labial or facial artery, which, in consequence of the syncope, had been overlooked when closing the wound.

vened, a circumstance which has occurred to me oftener than once after operations on the neck and cheek.

Little or no constitutional disturbance took place during the progress of the cure, and the woman returned home to her family completely well in three weeks after the extirpation of the tumour.

On inspecting the part at the present time, (nine months subsequent to the operation,) there appears no indication of the disease ever being reproduced, and the cheek has recovered its former appearance, except the remaining cicatrix, and a small depression occasioned by the unfortunate extraction of the molar teeth in the early stage of the disease.

After the operation was over, a section of the morbid tumour was made with the scalpel, and it seemed to all the medical attendants present, to partake of that character usually designated "medullary sarcoma," and bore a great affinity to the brain both in colour and texture.

After reciting the above case, which bears some affinity to the following observations, I cannot willingly quit the subject without calling the attention

of the Society to an instance of danger, (almost unknown amongst surgeons, even in the present century,) to which patients are exposed when undergoing operations about the neck, and which circumstance merits elucidation from the physiological and pathological enquirer.

The experience I have had in this department of surgery fully convinces me that whatever are the characters of tumours, or under whatsoever classification they may be arranged by nosological authors, when attached to important structures of the neck, whether in their incipient or advanced state, they eventually become more dangerous by excision, than such as are stationed on other parts of the body more distant from the heart, where the blood-vessels and nerves are more sparingly distributed; hence, I trust, a brief account of the following unfortunate case of Tumour on the Neck, which occurred to me more than thirty years ago, will be deemed worthy of perusal, and I feel the more inclined to give it publicity at this time in consequence of having lately seen the statement of two parallel cases, the one by M. Dupuytren, of Paris, in the *Medico-Chirurgical Review* for 1825, page 218; and the other, though not fatal, by Dr. Mott, Professor of Surgery in the University of New York *.

* See a late number of the said work.

An attempt to remove a Tumour seated on the Neck.

Mrs. Beardsworth, a delicate married lady of this town, consulted me respecting a tumour seated on the side of the neck, which had been progressively increasing in size for several years; its basis was very extensive, and occupied the whole of the lateral and posterior part, extending downwards from the ear to near the sternum and clavicle, and sidewise from the thyroid gland to the sterno-mastoid muscle, under which a part of the tumour was situated; its weight and bulk had rendered it insupportable, its texture was firm and immovable, with hard tuberos surface, but it was not painful on pressure.

Reflecting on the extent and situation of the tumour, and the delicate and reduced state of health under which the patient had long laboured, and its probable attachments to vital and important parts, I did not urge an operation, though much importuned, both by herself and friends. The lady then took the opinion of an eminent and experienced physician from a neighbouring town, who thought its removal might be effected with safety, and she being thereby influenced, I became again solicited to perform the operation, to which I consented, though more, I must say, in compliance therewith, than from any probable expectation of eventual success. .

The day for the operation being previously fixed, and every requisite preparation in readiness, I had the patient seated on a reclined chair, supported by assistants, and in the presence of the physician above alluded to.

I began the incisions with the scalpel a little below the ear, carrying them downwards over the tumour to the extent of not less than ten inches, and meeting in a line below the angle of the under jaw, leaving a portion of integuments between each incision so as to form an ellipsis; when on proceeding to dissect the skin aside to get at the basis of the tumour, a sudden and unexpected hissing gurgling noise rushed obviously from a large divided empty vein *, and the patient expired instantly, without either sigh, groan, or struggle, and every effort used to restore animation became fruitless. This unexpected event was truly appalling to all present, for scarcely an ounce of blood was lost on the occasion, and her death was then wholly attributed to a state of debility and syncope, which opinion, I acknowledge, remained unchanged till I accidentally met with the under-

* It has been noticed by authors that the veins about the neck are sometimes found irregularly distributed, and whether the incised vein, in this case, was the external jugular, or an anomalous variety, is not easy to say, for its calibre much exceeded that vessel in its natural state, and appeared flabby and empty. The instant the atmospheric air gained access and filled the vacuum, the hissing noise ceased, the patient expired, and the mouth of the vessel collapsed.

mentioned case by Dupuytren, &c. and the striking analogy which they bear to each other has induced me to transcribe the whole narrative as stated in the work before alluded to, together with the examination of the body after death, which manifestly discloses to my mind the real cause of death in both instances.

“ On the 19th of November, 1822, a fine young woman (Alexandrine Poirier) came to the Hotel Dieu, for a tumour of some size, situated on the posterior and lateral part of the neck. From its hardness, renitency, and insensibility, M. Dupuytren ascertained that it was of a cellulo-fibrous nature, and proposed its removal, to which the young woman consented. The operation was performed on the 22d of November, with all the skill and dexterity of that celebrated surgeon. No arteries were cut that required the ligature, and consequently there was very little hæmorrhage. Neither were there any muscles or large nerves divided. Just, however, as he was proceeding to separate the last shreds of attachment, and turn the tumour out, he was surprised to hear a somewhat prolonged hissing noise (*sufflement prolongé*) similar to that produced by the re-entrance of air into a vessel from which it had been exhausted. The operator stood for an instant astonished, and observed, that, were it not for the distance of the knife from the air passage, he would have thought that he had made an opening into it. He had

scarcely said the word, when the young woman cried out that she was dying, and instantaneously dropped down on the floor a lifeless corpse, to which all their efforts could not restore the slightest symptom of animation. This happened in the presence of nearly 400 spectators, and the body was examined next day, in the presence of full as many, with the most rigorous minuteness. Every part of the body was carefully dissected, but there was not a particle of morbid structure any where to be found. An examination of the heart, however, disclosed the cause of the melancholy catastrophe.

“The right auricle was distended like a bladder with air, which rushed out when cut open, without any admixture of blood. Fluid blood was found in the other cavities of the heart, as also in the different vessels. Great quantities of air were found in all the vessels. There was no other unnatural appearance in any part of the body.”

On this important case the Editor of the Medical and Chirurgical Review observes, “We have not the smallest doubt, that Dupuytren was perfectly correct in his conclusion, that air had rushed in through one of the veins of the neck, and thus caused instant death. We think it a pathological fact, however, which bears on the physiology of the circulation.

“It proves that the heart acts as a sucking, as

well as a forcing pump, otherwise air could never have passed from a cut vein in the neck down into the right chambers of the heart.

“It is highly probable, that, in consequence of the morbid state of the parts, the mouth of the cut vein had remained patulous*, and thus readily admitted the air.”

The other case related by Dr. Mott, Professor of Surgery in the University of New York, which though not fatal, fully corroborates the opinion formed by myself and M. Dupuytren, as well as the Editor of the Medical and Chirurgical Review, of the cause and danger attending the division of veins in the vicinity of the neck. Hence, I feel it incumbent on me, in this place, to quote the sentiments and deductions of so eminent a surgeon as Dr. Mott:—

“In an attempt which I made to remove the parotid gland in an enlarged and scirrhus state, the facial vein, where it passes over the base of the lower jaw, was opened in dissecting the integuments from the tumour, in the early stage of the operation, before a single artery was tied. At the instant this vessel was opened, the attention of all present was arrested by the gurgling noise of air passing into some small opening.

* This state of the incised vein bears exactly the resemblance of that of the case of Mrs. Beardsworth before-mentioned.

“ The breathing of the patient immediately became difficult and laborious, the heart beat violently and irregularly, his features were distorted, and convulsions of the whole body soon followed to so great an extent as to make it impossible to keep him on the table. He lay upon the floor in this condition for near half an hour, as all supposed in articulo mortis.

“ As the convulsions gradually left him, his mouth was permanently distorted, and complete hemiplegia was found to have ensued ; an hour or more elapsed before he could articulate, and it was nearly a whole day before he recovered the use of his arm and leg. From a belief that these effects arose from the admission of air into the blood-vessels, which was not doubted by any person present, I instantly called to mind a set of experiments which I made some twenty years since upon dogs, by blowing air into the circulation, by inserting a blow-pipe into a large superficial vein upon the thigh, and was forcibly struck with the similarity of result.”

On referring to the Physiological and Pathological Researches of my friend, Dr. Blundell of London, I find some experiments related of the introduction of air into the blood-vessels of dogs, from which (and the fore-mentioned cases) it appears that the entrance of even a few drachms, though introduced at a distance from the heart, and whilst the

animals were in perfect health, eventually produced considerable distress and danger.

Hence we may conclude, when extirpating morbid tumours seated about the neck, where the veins are frequently enlarged and superficial, and the parts subject to organic derangement of structure, and the patient at the same time labouring under a state of mental anxiety and constitutional debility; that under these unfavourable circumstances, if a large vein be opened and syncope ensue, the danger becomes manifestly alarming; and to avert such incidents, where there is reason to anticipate mischief, would it not be prudent on the part of the surgeon, when commencing such operation, either to apply pressure on the visible veins which appear in the way of the knife, or secure them by one or two ligatures either effectually or only during the time of the operation? whereby the operator would be secured from fear and the patient protected from danger. Reflecting on the foregoing cases, I have lately been struck with the danger to which, in the course of a long practice, I have frequently been exposed when operating on tumours of this description. It looks now more like a dream than a reality, and it makes me almost shudder when meditating on past occurrences, from which I should now almost shrink, when urged to remove tumours seated about the neck, such as I at one time had no hesitation of undertaking, though I have been uniformly successful,

except in the case of Mrs. Beardsworth above related.

I trust that the above recital, which I have judged requisite to lay before the public, will be deemed so far important as to stand on record for a beacon to guide the practical surgeon on his way, and also excite some one more equal to the task than myself to elucidate the immediate cause of death, in such deplorable instances of surgical exigence.

*Blackburn, Lancashire,
December 28, 1829.*